

IN THE CLAIMS:

The following Listing of Claims replaces all prior Listings and versions of claims in the above-identified application.

Listing of Claims:

1-57. (Cancelled)

58. (Currently Amended) A therapeutic composition that, when administered to an animal, reduces IgG-mediated tissue damage, said therapeutic composition comprising an inhibitory compound that inhibits the activity of an Fcγ receptor (FcγR) protein, wherein said inhibitory compound binds to said FcγR protein, said inhibitory compound being identified by the method comprising:

a) providing a three dimensional structure of an FcγR protein selected from the group consisting of FcγRI, FcγRIIa, FcγRIIb, FcγRIIc and FcγRIIIb, wherein said three dimensional structure of said FcγR protein substantially conforms to atomic coordinates represented by Table 1;

b) using said three dimensional structure of said FcγR protein to design a chemical compound selected from the group consisting of a compound that inhibits binding of FcγR protein to IgG, ~~a compound that substantially mimics the three dimensional structure of FcγR protein~~ and a compound that inhibits binding of FcγR protein with a molecule that stimulates cellular signal transduction through an FcγR protein;

c) chemically synthesizing said chemical compound; and

d) evaluating the ability of said synthesized chemical compound to reduce IgG-mediated tissue damage.

59. (Original) The composition of Claim 58, wherein said IgG-mediated tissue damage results from a biological response selected from the group consisting of IgG-mediated hypersensitivity, IgG-mediated recruitment of inflammatory cells, and IgG-mediated release of inflammatory modulators.

60. (Original) The composition of Claim 58, wherein said structure substantially conforms with the atomic coordinates represented in Table 1.

61. (Original) The composition of Claim 58, wherein said chemical compound is selected from the group consisting of an inorganic compound and an organic compound.

62. (Currently Amended) The composition of Claim 58, wherein said chemical compound is selected from the group consisting of ~~oligonucleotides~~, peptides, peptidomimetic compounds and small organic molecules.

63. (Currently Amended) The composition of Claim 58, wherein said chemical compound is ~~selected from the group consisting of an analog of said FcγR protein, a substrate analog of said FcγR protein and a peptidomimetic compound of said FcγR protein.~~

64. (Original) The composition of Claim 58, wherein said composition further comprises a component selected from the group consisting of an excipient, an adjuvant, and a carrier.

65-74. (Cancelled)

75. (New) The composition of Claim 58, wherein the FcγR protein is FcγRIIa.

76. (New) The composition of Claim 58, wherein the compound binds to the Ig-binding site of FcγR protein.

77. (New) The composition of Claim 76, wherein the FcγR is FcγRIIa (represented by SEQ ID NO:3), and wherein the compound binds to a surface on the Ig-binding site of the FcγRIIa comprising a structure defined by the conformation of residues 155, 156, 158-160, 113-116, 129, 131, 133 and 134 of SEQ ID NO:3.

78. (New) The composition of Claim 58, wherein the compound binds to the upper groove between two FcγR monomers.

79. (New) The composition of Claim 78, wherein the FcγR is FcγRIIa (represented by SEQ ID NO:3), and wherein the compound binds to a surface on the upper groove of the FcγRIIa comprising a structure defined by the conformation of residues 117-121, 125-129, 150-154 and 157-161 of SEQ ID NO:3.

80. (New) The composition of Claim 58, wherein the compound binds to the dimerization interface between two FcγR protein monomers.

81. (New) The composition of Claim 80, wherein the FcγR is FcγRIIa (represented by SEQ ID NO:3), and wherein the compound binds to a surface on said interface comprising a structure defined by the conformation of residues 117-131 and residues 150-164 of SEQ ID NO:3.

82. (New) The composition of Claim 58, wherein the compound binds to the interface between Domains 1 and 2 of said Fc γ R protein.

83. (New) The composition of Claim 82, wherein the Fc γ R is Fc γ RIIa (represented by SEQ ID NO:3), and wherein the compound binds to a surface on said interface comprising a structure defined by the conformation of amino acid residues 17-20 of SEQ ID NO:3.

84. (New) The composition of Claim 82, wherein the Fc γ R is Fc γ RIIa (represented by SEQ ID NO:3), and wherein the compound binds to a surface on a cleft region between Domains 1 and 2 of said Fc γ RIIa protein, wherein said surface comprises a structure defined by the conformation of amino acid residues 12-14, 6-10, 77-80, 93-96 and 101 of SEQ ID NO:3.